

## CLAIM

Virtual Fixture system uses 4 main components ,

- A. Base Plate with horizontal bored holes and corresponding slots around all side edges , containing a threaded rod , a bearing , and pivot module with coupler.
- B. Riser Base which is a body with slots along 2 sides that connect to pivot module . Riser body also has centered bore which contains threaded rod , a bearing , and coupler .
- C. Riser which is a vertical cylinder attached to Riser Base with internal threaded rod , bearing , and coupler .
- D. Probe which is attached to coupler on threaded rod of the Riser .

Claim 1 Using knobs attached to threaded rods around Base Plate side edges allows user to obtain fluid movement in set horizontal planar axis of probe .

Claim 2 Using knob attached to Riser Base threaded rod allows user to obtain fluid movement in set angular planar axis of probe . Riser Base also rotates on pivot module and locks on desired planaraxis that is determined .

Claim 3 Using knob attached to threaded rod on Riser allows user to obtain fluid movement of probe in vertical axis . Riser also has rotation control of probe .

Claim 4 Using multiple probes configuration on Base Plate , a user can locate any shape , or size workpiece that fits within work area of fixture . Which eliminates having a fixture for each type of workpiece .